region with an extremely slight thickness and a number of likewise etched-out resistive films. These resistive films constitute at least one temperature-dependent measurement resistor and for example one heating resistor. Preferably, the heating resistor is disposed in the center of the membrane and, with the aid of a temperature sensor, is regulated to an over temperature. Upstream and downstream of the heating region constituted by the heating resistor, two measurement resistors are disposed symmetrically to the heating region. A measurement element of this kind is known from the SAE Paper 950433 mentioned above, as well as from DE-OS 42 19 454, and US 5,404,753, the disclosure of which is expressly intended to be a component of the current patent application. The support body 20 of the measurement element 21 is accommodated flush in a recess in a plate-shaped mount comprised, for example, of metal, and is secured there, for example, by means of adhesive. The individual resistive films of the measurement element 21 are electrically connected by means of connecting lines 26 that extend inside the device 1 to an electronic evaluation circuit 27 depicted with dashed lines in Figs. 1 and 3, which includes, for example, a bridge-like resistive measurement circuit. With a plug connection 28 provided on the securing part 19, the electrical signals produced by the evaluation circuit 27 can also be supplied, for example, to another electronic control device for evaluation. --

B1 Cont

Please replace the paragraph which extend from page 6, line 21 through page 7, line 25 with the following amended paragraph:

B2 -- As depicted in Figs. 1 and 2, the measurement part 17 of the device 1 has a block-shaped form and a measurement conduit 30 that extends along a measurement

conduit axis 12 that extends centrally in the measurement conduit 30 from an inlet 32 with a rectangular cross section to an outlet 33 that likewise has a rectangular cross section. The device 1 is installed in the intake line 9, preferably with the measurement conduit axis 12 parallel to the center axis 11. However, it is also possible to install the device 1 with an oblique installation position, rotated around the plug axis 10. In addition to or instead of the oblique installation position, it is also conceivable to install the device 1 in a tilted installation position, inclined around the center axis 11. The measurement conduit 30 transitions downstream into an S-shaped deflection conduit 31. The measurement conduit 30 is defined by a top face 37, which is farther from the center axis 11 and is disposed above in Figs. 1 and 3, and by a bottom face 38, which is closer to the center axis 11 and is disposed below in Figs. 1 and 3, as well as by two side faces 39, 40, wherein only one of the side faces extending parallel to the plane of the drawing is visible in Figs. 1 and 3, namely the side face 39. The top face 37 and the bottom face 38 extend toward each other in the direction 43 of the medium flowing in the measurement conduit 30 toward the measurement element 21, and end with a narrowest cross section at a narrowest point 36 at the outlet 33 of the measurement conduit 30, which at the same time represents an inlet 34 of the deflection conduit 31. The measurement element 21 with the resistive films has a surface 24 exposed to the flow 43 in the measurement conduit 30, which is flush with a surface 25 of the mount 23. The faces 37, 38 of the measurement conduit 30 extend in planes which and lateral to, or essentially perpendicular to the surface 24 of the plate-shaped measurement element 21, and by means of their extending toward each other as mentioned above enclose an inclination angle α, which is preferably approx. 8°. --